## NIOSH Personal Protective Technology Program

PPT Program Stakeholder Meeting March 2-3, 2010







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## Meeting Objectives

- Provide a forum for stakeholders to interact with PPT Program researchers about ongoing research
- Provide targeted presentations and breakout sessions to identify user needs and facilitate PPT Program strategic planning





## NIOSH Program Portfolio

NORA / NIOSH	NIOSH Cross Sector Programs (N=24)	
Industry Sectors (N=8)		
<ul> <li>Agriculture, forestry, and fishing</li> <li>Construction</li> <li>Healthcare and social assistance</li> <li>Mining <ul> <li>Oil &amp; Gas Extraction</li> </ul> </li> <li>Manufacturing</li> <li>Services <ul> <li>Public Safety</li> </ul> </li> <li>Transportation, warehousing, and utilities</li> <li>Wholesale and retail trade</li> </ul>	<ul> <li>Authoritative recommendations development</li> <li>Cancer, reproductive, cardiovascular, neurological &amp; renal diseases</li> <li>Communications and information dissemination</li> <li>Emergency preparedness/response</li> <li>Global collaborations</li> <li>Health hazard evaluation (HHE)</li> <li>Hearing loss prevention</li> <li>Immune, dermal and infectious diseases</li> <li>Musculoskeletal disorders</li> <li>Personal Protective Technology (PPT)</li> </ul>	<ul> <li>Radiation dose deconstruction</li> <li>Respiratory diseases</li> <li>Training grants</li> <li>Traumatic injury</li> <li>Work organization and stress-related disorders</li> <li>Economics</li> <li>Exposure assessment</li> <li>Engineering controls</li> <li>Work life initiative</li> <li>Occupational health disparities</li> <li>Small business assistance and outreach</li> <li>Surveillance</li> <li>Nanotechnology</li> <li>Prevention through design</li> </ul>



## NIOSH PPT / NPPTL Vision & Mission

The VISION is to be the leading provider of quality, relevant, and timely PPT research, training, and evaluation.

The MISSION of the PPT program is to prevent work-related injury, illness and death by advancing the state of knowledge and application of personal protective technologies (PPT).









PPT in this context is defined as the technical methods, processes, techniques, tools, and materials that support the development and use of personal protective equipment worn by individuals to reduce the effects of their exposure to a hazard.





### NPPTL & NIOSH PPE/PPT Program Activities

# Scientific Excellence

- Surveillance
- Scientific evaluations
- Program Evaluations

## Program Management

PPT

#### **Outreach**

- Health Communications
- Respirator Trusted Source Site

#### Technology Evaluation

- Respirator Certification Program
- Quality Audit Program
- Certified Product Investigations
- Firefighter SCBA Investigations
- Long-term Field Evaluation

## Policy & Standards Development

- Enhancements to 42 CFR
   Part 84
- Chemical, Biological, Radiological, and Nuclear (CBRN) Respirator Standards Development
- Guidance Document Development

#### Technology Research

- Respiratory Protection
- Protective Clothing & Ensembles
- Integration of Sensors& Electronics
- Human Performance
- Fall Protection
- Hearing Protection







## PPT Program







# NIOSH PPT Program Relevance and Impact



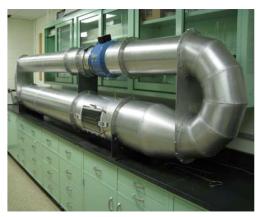
#### **Mine Escape Issues**

- Mine Emergency Respirator Investigations
- New Technology Research
- Escape Respirator Research
- Escape Respirator
   Standards
- MSHA Collaboration
- Respirator Certification

#### **CBRN** Issues

- Respirator Standards Development
- CBRN PPT Research
- Respirator Certification
- NFPA/IAFF Collaboration
- TSWG IAA
- OSHA Collaboration





#### Nanotechnology Issues

- Filtration Research
- Protective Clothing Research
- Respirator Research
- Respirator Certification
- Workplace Guidance

#### **Pandemic Issues**

- N95 Respirator Research
- Standards (Total Inward Leakage)
- Respirator Certification
- FDA Collaboration
- National Academies
   Activities
- Pandemic Planning and Response







# National Academies' PPT Program Evaluation Jun 2008

#### **PPT Scores**

Impact = 4

The program has made some contributions to end outcomes or wellaccepted intermediate outcomes.

Relevance = 4

The program's work is in priority subject areas, and NIOSH is engaged in appropriate transfer activities for completed projects or reported results.

#### **Recommendations**

- 1. Implement and Sustain a Comprehensive National PPT Program
- 2. Establish PPT Research
  Centers of Excellence
  and Increase Extramural
  PPT Research
- 3. Enhance the Respirator Certification Process
- 4. Increase Research on the Use and Usability of PPT
- 5. Assess PPT Use and
  Effectiveness in the
  Workplace Using a LifeCycle Approach

#### **Emerging Issues**

Continue research in priority areas

New materials technology, including "no-fit" respirators

PPT ensembles and seamless integration of multiple PPT components

Usability, comfort, ergonomics, and human factors which determine whether or not the PPE is worn by the worker

Enhancing the culture of workplace safety through worker education, training, and understanding of hazardous exposure risk to health

Other emerging issues



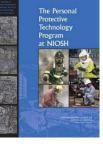




## Agenda

#### Tuesday, March 2<sup>nd</sup>

7:15 – 8:00	Registration – Poster Room Open	
8:00 – 8:15	Welcome – Regency A Ballroom	
8:15 – 8:45	Presentation: Why Don't Workers Use PPE? - Regency A Ballroom	
8:45 – 9:15	Poster Session – Regency B & C Ballrooms	
9:15 – 10:15	Presentation: PPE Ensembles - Regency A Ballroom	
10:15 – 10:45	Presentation: Pushing the limits - PPE Design Criteria - Regency A Ballroo	
10:45 – 12:15	Breakout Sessions 1, 2, 3 Session 1: Pushing the Limits: Designing the Next Generation of N95 Filtering Facepiece Respirators (FFRs) – Lindberg Room Session 2: PPE Selection, Interoperability and Compatibility Issues: Dysfunction or Co-Function – Wright A Room Session 3: Protective Clothing Technologies, Materials and Performance Criteria – Wright B Room	
12:15 – 1:15	Luncheon Keynote Speaker - Regency A Ballroom	
1:15 – 2:00	PPT – Past, Present, Future - Regency A Ballroom	
2:00 - 3:00	Poster Session - Regency B & C Ballrooms	
3:00 - 4:30	Breakout Sessions 1, 2, 3 (same as previous locations)	









4:30 - 5:00

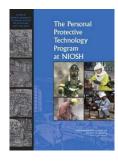


Summary of Day 1 Breakout Sessions – Regency A Ballroom

## Agenda

#### Wednesday, March 3<sup>rd</sup>

7:15 – 8:15	Poster Session – Regency B & C Ballrooms
8:15 – 9:30	Presentations: Respirator and PPE Configuration Management Challenges
	and NIOSH Information Resources – Regency A Ballroom
9:30 - 10:30	Session 4: Buyer Beware: Informing Stakeholders of Counterfeit
	Respirators and Misrepresentations of NIOSH Approval –
	- Lindberg Room
	- Wright A Room
	- Wright B Room
10:30 – 11:00	Poster Session – Regency B & C Ballrooms
11:00 – 12:00	Summary of Day 2 Breakout Sessions – Regency A Ballroom
	Poster Awards















## NIOSH PPT Program









Visit Us at: <a href="http://www.cdc.gov/niosh/programs/ppt/">http://www.cdc.gov/niosh/programs/ppt/</a>

http://www.cdc.gov/niosh/npptl/default.html

Thank you



